

Rationale

In order to identify the age of a condor and other information based on the condor's appearance, students will illustrate condors at different ages.

Aligned Standards

NGSS: Communicating Information; Patterns and Scale
LS1.B: Stages of the condor life cycle, growth, and development are illustrated through size and color. (3-LS1-1)

Vocabulary

hatchling
nestling
juvenile
sub-adult
adult

Materials

Art materials: crayons, pencils, markers, colored paper, cotton balls, textured material, etc.

Objectives

1. Students identify characteristics of condors at different ages
2. Students infer information from a condor's appearance

Time

Teaching time: one hour (approximately)

Tech Integration

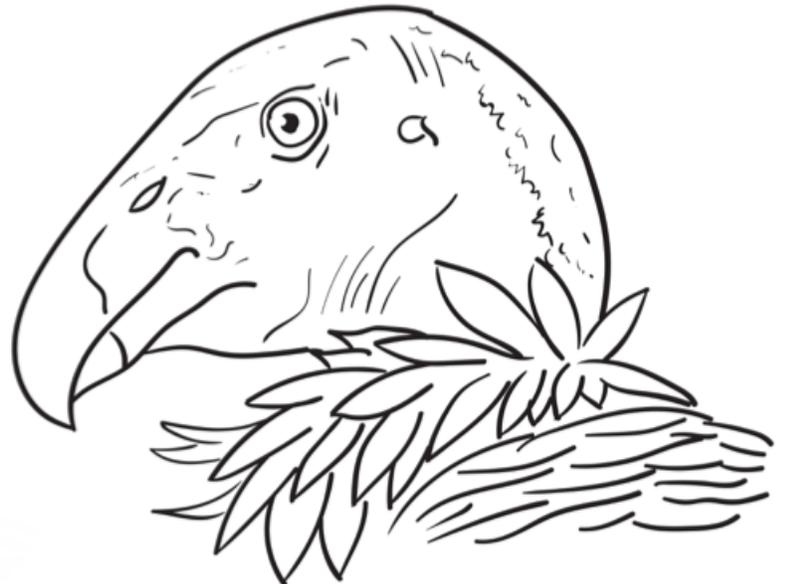
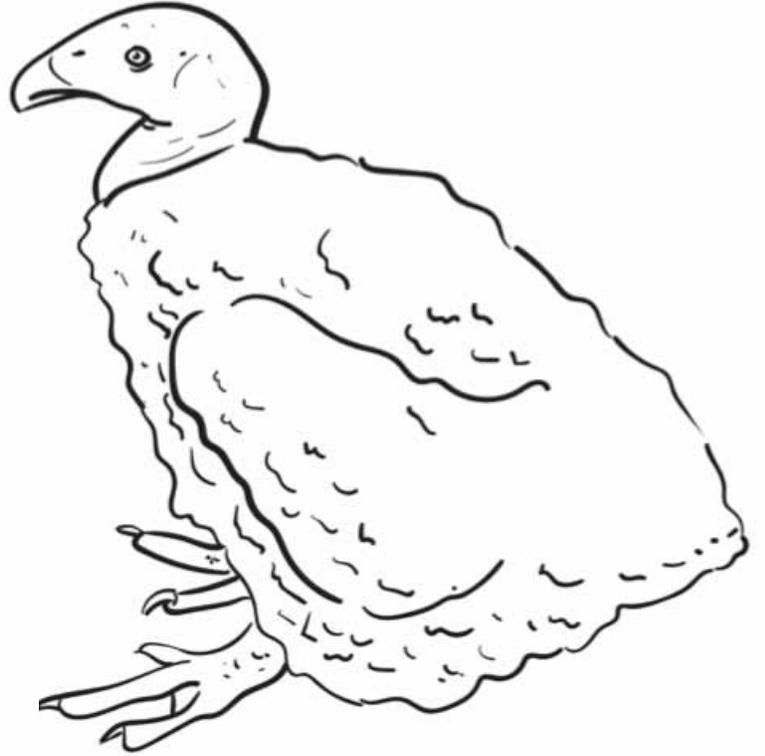
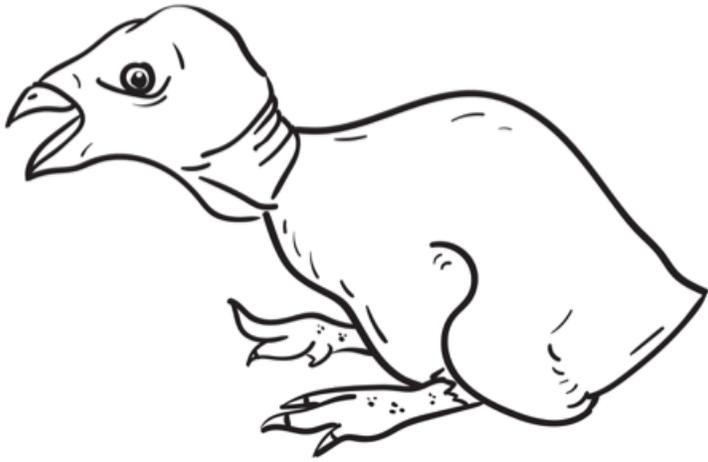
Photos of condors at different stages of life

PROCEDURE – DAY 1**IMAGES (20 minutes)**

Use photos of condors to show students different ages or life stages of the California condor from the colors of condor wings, heads, feathers, etc. Students should identify each condor's age range and abilities based on those differences.

CREATE (40 minutes)

Students illustrate the differences between condors with materials given. Students must illustrate a hatchling, nestling, juvenile, sub-adult, and adult.



Before you begin

Prepare to project images of condors from various photo libraries. Print out the corresponding page with condor illustrations for each student.

What to do

In the center of our conservation clear visual cues help us identify certain facts about condors. The wing tag is an easy cue to determine whether or not the bird in question is a condor. Age is the typical characteristic to identify by a condor's size and color. The sex of the bird, however, can't be determined by size or color.

Images

This lesson could be used during class time specified for art. Begin the lesson by projecting images from the "Stages of Life" photo library. Photos in the library are not given in order of age. You may choose to order the photos chronologically ahead of time, or keep them in a mixed order. Have the students guess the color and texture of the condor's feathers (see Optional Extension 1). Have the students guess the ages of the condors in the images. See if the students can spot the wing tags. Ask the students if the condor in the image projected is able to fly, forage, feed a chick, etc.

The condor chicks that have just hatched will be much smaller than the condor nestlings that have lived in the nest for a month or two. The hatchling will have peach colored skin on its head, a light gray colored beak, black eyes, and fuzzy white feathers. The nestling will have gray and white feathers, a beak from gray to black in color, gray or black colored eyes, and gray-peach colored skin on its head. Nestlings often exercise in and around the nest site to build muscles, especially for flight.

A juvenile condor has small black feather on gray head skin, gray to brown eyes, and a black beak. The juvenile condor has all black feathers with no white feathers on the underside of the wings. Juvenile condors have "fledged," meaning they have taken a first flight and are able to soar and forage with adult condors. At around 5 to 6 years of age, the "sub-adult" condor will have white feathers coming in on the underside of its wings. The skin on the head will have fewer small black feathers and the skin will be changing to an orange-pink color. The adult condor will have white feathers on the underside of the wing, an orange and pink colored head and neck with very few black feathers, a white beak, and red eyes. Adult condors have the potential to mate and take care of eggs, chicks, etc.

Create

After going through the pictures, pass out the condor portrait template resource page found in the Lesson Overview. Given various art supplies (cotton balls, crayons, markers, glossy paper, etc.), have the students illustrate the different life stages of the condor. Make sure each student adds color and labels to each condor. Possible labels may include: hatchling, nestling, juvenile, sub-adult, and adult. Walk around the classroom and assist students. Refer to the Stages of Life photo library as necessary.

Teaching time: one hour
(approximately)



OPTIONAL EXTENSION:

Since the students might already know the size or feather colors of condors at different ages, try quizzing the students before the photos from the Stages of Life photo library appear. Include all students by having them raise their hands if they agree on any guesses. For example, the teacher can ask, "What do the feathers of condor chicks look like?" before projecting the picture. A student may offer the answer "fluffy and white." The teacher may respond, "Raise your hand if you think the feathers may be fluffy and white." Students are given a moment to raise their hands. Then the teacher may ask for a second guess or may show the image of the chick.



OPTIONAL EXTENSION:

Using the illustrations provided, have the students create a flip book to show the change in color of the condor's appearance over time.

ELL MODIFICATION:

Translate the labels for each illustration into Spanish.